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| Splint Bone Removal | |
| Relevant Anatomy | The second and fourth metacarpal bones, or splint bones are attached to the abaxial surface of the medial and lateral proximal sesamoids by fibrous bands. |
| Site Preparation | The surgical site is shaved and aseptically prepped for surgery. |
| Instruments needed | General surgery pack  Curved osteotome  Chisel  Mallet  Periosteal elevator |
| Indications | Fractures of the splint bones |
| Anaesthesia and Preparation | General anaesthesia is recommended for this operation.  The horse is placed in either lateral recumbency with the  affected splint bone uppermost or dorsal recumbency  with the injured leg suspended. |
| Surgical Technique | 1. A variable-length incision is made directly over the splint bone, extending from approximately 1 cm distal to the distal extremity of the splint bone to approximately 2 cm proximal to the proposed site of amputation. 2. The subcutaneous fascia is incised along the same line as the incision, through the periosteum. 3. The distal end of the splint bone is undermined with the aid of sharp dissection and is freed from surrounding 4. Fascia and the end is grasped firmly with forceps, such as Ochsner forceps. 5. With further sharp dis-section, the splint bone is separated from its attachments to the third metacarpal or metatarsal bone either a chisel or a curved osteotome. 6. The splint bone should be amputated above the fracture site or the area of infection with the aid of a chisel or osteotome and removed (a large curette is sometimes necessary to remove diseased bone adequately). 7. Following removal of the splint bone, the subcutaneous tissue should be closed with a synthetic absorbable suture. The skin should be closed with a monofilament nonabsorbable suture using a simple interrupted pattern. 8. The incision is covered with an antimicrobial dressing and is placed under a pressure bandage. |
| Post-operative | 1. Tetanus prophylaxis is administered. 2. Antibiotics are used in cases of acute (active) osteitis or osteomyelitis. 3. The limb should be kept under a pressure bandage for 3 to 4 weeks, due to haemorrhage, change the bandage in the first 1 to 2 days postoperatively. 4. Skin sutures should be removed 10 to 14 days after surgery. |
| Considerations | 1. When amputating a lateral splint bone in the pelvic limb, be careful to avoid incising the large, dorsal metatarsal artery III (great metatarsal artery), which lies above and between the third and fourth metatarsal bones in the interosseous space. If the artery is inadvertently severed, it can be ligated without causing problems associated with loss of blood supply to the distal limb. 2. Some patients with a severe infectious process or significant dead space may require a Penrose drain for a few days, however, a good pressure bandage is often adequate to reduce dead space. |
| Complications and Prognosis | In Standardbred horses, suspensory desmitis rather than the fractured splint bone may limit the prognosis for  return to athletic soundness. |